## SUBSTITUTE SEQUENCE LISTING

- <110> Bihain, Bernard Bougueleret, Lydie Yen-Potin, Frances
- <120> LSR Receptor, Its Activity, Its Cloning and Its Application To The Diagnosis Prevention And/or Treatment of Obesity and Related Risks or Complications

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aaa aa Lys Ly	ıg ggç vs Gl	g tcg / Ser	ggc Gly 475	Glu	aga Arg	agg Arg	agg Arg	gtt Val 480	Tyr	agg Arg	gag Glu	gaa Glu	gaa Glu 485	GLu		1675
gaa ga Glu Gl	ng gaq Lu Gli	g ggc 1 Gly 490	Gln	tac Tyr	ccc Pro	cca Pro	gca Ala 495	Pro	cca Pro	cct Pro	tac Tyr	tca Ser 500	Glu	act Thr		1723
gac to Asp Se	eg caq er Gli .505	n Ala	tca Ser	cgg Arg	gag Glu	agg Arg 510	Arg	ctg Leu	aaa Lys	aag Lys	aat Asn 515	Leu	gcc Ala	ctg Leu	·	1771
agt co Ser A	gg gaa rg Gl	a agt u Ser	tta Leu	gtc Val	gto	tga *	tcc	acgt	ttt	gtat	gtag	ict t	ttgt	acttt	:	1825

520 525

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Thr Leu Thr Val Pro Ile Val Ile Trp Lys Tyr Lys Ser Phe Cys Arg 65 70 75 80

Asp Arg Ile Ala Asp Ala Phe Ser Pro Ala Ser Val Asp Asn Gln Leu 85 90 95

Asn Ala Gln Leu Ala Ala Gly Asn Pro Gly Tyr Asn Pro Tyr Val Glu 100 105 110

Cys Gln Asp Ser Val Arg Thr Val Arg Val Val Ala Thr Lys Gln Gly
115 120 125

Asn Ala Val Thr Leu Gly Asp Tyr Tyr Gln Gly Arg Arg Ile Thr Ile 130 135 140

Thr Gly Asn Ala Asp Leu Thr Phe Glu Gln Thr Ala Trp Gly Asp Ser 145 150 155 160

Gly Val Tyr Tyr Cys Ser Val Val Ser Ala Gln Asp Leu Asp Gly Asn 165 170 175

Asn Glu Ala Tyr Ala Glu Leu Ile Val Leu Val Tyr Ala Ala Gly Lys 180 185 190

Ala Ala Thr Ser Gly Val Pro Ser Ile Tyr Ala Pro Ser Ile Tyr Thr 195 200 205

His Leu Ser Pro Ala Lys Thr Pro Pro Pro Pro Pro Ala Met Ile Pro 210 215 220

Met Gly Pro Pro Tyr Gly Tyr Pro Gly Asp Phe Asp Arg His Ser Ser

- Val Gly Gly His Ser Ser Gln Val Pro Leu Leu Arg Asp Val Asp Gly 245 250 255
- Ser Val Ser Ser Glu Val Arg Ser Gly Tyr Arg Ile Gln Ala Asn Gln 260 265 270
- Gln Asp Asp Ser Met Arg Val Leu Tyr Tyr Met Glu Lys Glu Leu Ala 275 280 285
- Asn Phe Asp Pro Ser Arg Pro Gly Pro Pro Asn Gly Arg Val Glu Arg 290 295 300
- Ala Met Ser Glu Val Thr Ser Leu His Glu Asp Asp Trp Arg Ser Arg 305 310 315 320
- Pro Ser Arg Ala Pro Ala Leu Thr Pro Ile Arg Asp Glu Glu Trp Asn 325 330 335
- Arg His Ser Pro Gln Ser Pro Arg Thr Trp Glu Gln Glu Pro Leu Gln 340 345 350
- Glu Gln Pro Arg Gly Gly Trp Gly Ser Gly Arg Pro Arg Ala Arg Ser 355 360 . 365
- Val Asp Ala Leu Asp Asp Ile Asn Arg Pro Gly Ser Thr Glu Ser Gly 370 375 380
- Arg Ser Ser Pro Pro Ser Ser Gly Arg Arg Gly Arg Ala Tyr Ala Pro 385 390 395 400
- Pro Arg Ser Arg Ser Arg Asp Asp Leu Tyr Asp Pro Asp Asp Pro Arg 405 410 415
- Asp Leu Pro His Ser Arg Asp Pro His Tyr Tyr Asp Asp Ile Arg Ser 420 425 430
- Arg Asp Pro Arg Ala Asp Pro Arg Ser Arg Gln Arg Ser Arg Asp Pro 435 440 445
- Arg Asp Ala Gly Phe Arg Ser Arg Asp Pro Gln Tyr Asp Gly Arg Leu 450 455 460
- Leu Glu Glu Ala Leu Lys Lys Lys Gly Ser Gly Glu Arg Arg Arg Val 465 470 475 480
- Tyr Arg Glu Glu Glu Glu Glu Glu Glu Gly Gln Tyr Pro Pro Ala Pro
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- Pro Pro Tyr Ser Glu Thr Asp Ser Gln Ala Ser Arg Glu Arg Arg Leu 500 505 510
- Lys Lys Asn Leu Ala Leu Ser Arg Glu Ser Leu Val Val 515 520 525

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cgg Arg	gac Asp	cgc Arg 135	atc Ile	gc <u>c</u> Ala	gat Asp	gcc Ala	ttc Phe 140	tcc Ser	ccg Pro	gcc Ala	agc Ser	gtc Val 145	gac Asp	aac Asn	cag Gln	547
ctc Leu	aat Asn 150	gcc Ala	cag Gln	ctg Leu	gca Ala	gcc Ala 155	ggg Gly	aac Asn	cca Pro	ggc Gly	tac Tyr 160	aac Asn	ccc Pro	tac Tyr	gtt Val	595
gag Glu 165	tgc Cys	cag Gln	gac Asp	agc Ser	gtg Val 170	cgc Arg	acc Thr	gtc Val	agg Arg	gtc Val 175	gtg Val	gcc Ala	acc Thr	aag Lys	cag Gln 180	643
ggc Gly	aac Asn	gct Ala	gtg Val	acc Thr 185	ctg Leu	gga Gly	gat Asp	tac Tyr	tac Tyr 190	cag Gln	ggc Gly	cgg Arg	agg Arg	att Ile 195	acc Thr	691
atc Ile	acc Thr	gga Gly	aat Asn 200	gct Ala	gac Asp	ctg Leu	acc Thr	ttt Phe 205	gac Asp	cag Gln	acg Thr	gcg Ala	tgg Trp 210	ggg	gac Asp	739
agt Ser	ggt Gly	gtg Val 215	tat Tyr	tac Tyr	tgc Cys	tcc Ser	gtg Val 220	gtc Val	tca Ser	gcc Ala	cag Gln	gac Asp 225	ctc Leu	cag Gln	ggg Gly	787
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gtg Val 245	gct Ala	gag Glu	ctc Leu	tta Leu	cct Pro 250	ggt Gly	ttt Phe	cag Gln	gcg Ala	ggg Gly 255	ccc Pro	ata Ile	gaa Glu	gac Asp	tgg Trp 260	883
ctc Leu	ttc Phe	gtg Val	gtt Val	gtg Val 265	gta Val	tgc Cys	ctg Leu	gct Ala	gcc Ala 270	ttc Phe	ctc Leu	atc Ile	ttc Phe	ctc Leu 275	ctc Leu	931
ctg Leu	ggc Gly	atc Ile	tgc Cys 280	tgg Trp	tgc Cys	cag Gln	tgc Cys	tgc Cys 285	ccg Pro	cac His	act Thr	tgc Cys	tgc Cys 290	tgc Cys	tac Tyr	979
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gct Ala	atg Met	att	ccc Pro	atg Met 345	Gly	cct	gcc Ala	tac Tyr	aac Asn 350	Gly	tac Tyr	cct Pro	gga Gly	gga Gly 355	tac Tyr	1171
cct	gga	gac	gtt	gac	agg	agt	ago	tca	gct	ggt	ggc	caa	ggc	tcc	tat:	1219

Pro Gly Asp Val Asp Arg Ser Ser Ser Ala Gly Gly Gln Gly Ser Tyr 360 365 370

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agt Ser	ggc Gly 390	tac Tyr	agg Arg	att Ile	cag Gln	gcc Ala 395	agc Ser	cag Gln	cag Gln	gac Asp	gac Asp 400	tcc Ser	atg Met	cgg Arg	gtc Val	1	1315
ctg Leu 405	tac Tyr	tac Tyr	atg Met	gag Glu	aag Lys 410	gag Glu	ctg Leu	gcc Ala	aac Asn	ttc Phe 415	gac Asp	cct Pro	tct Ser	cga Arg	cct Pro 420	1	1363
ggc Gly	ccc Pro	ccc Pro	agt Ser	ggc Gly 425	cgt Arg	gtg Val	gag Glu	cgg Arg	gcc Ala 430	atg Met	agt Ser	gaa Glu	gtc Val	acc Thr 435	tcc Ser	:	1411
ctc Leu	cac His	gag Glu	gac Asp 440	gac Asp	tgg Trp	cga Arg	tct Ser	cgg Arg 445	cct Pro	tcc Ser	cgg Arg	ggc Gly	cct Pro 450	gcc Ala	ctc Leu	:	1459
acc Thr	ccg Pro	atc Ile 455	cgg Arg	gat Asp	gag Glu	gag Glu	tgg Trp 460	ggt Gly	ggc Gly	cac His	tcc Ser	ccc Pro 465	cgg Arg	agt Ser	ccc Pro	:	1507
agg Arg	gga Gly 470	tgg Trp	gac Asp	cag Gln	gag Glu	ccc Pro 475	gcc Ala	agg Arg	gag Glu	cag Gln	gca Ala 480	ggc Gly	ggg	ggc Gly	tgg Trp		1555
cgg Arg 485	gcc Ala	agg Arg	cgg Arg	ccc Pro	cgg Arg 490	gcc Ala	cgc Arg	tcc Ser	gtg Val	gac Asp 495	gcc Ala	ctg Leu	gac Asp	gac Asp	ctc Leu 500	. :	1603
acc Thr	ccg Pro	ccg Pro	agc Ser	acc Thr 505	gcc Ala	gag Glu	tca Ser	ggg Gly	agc Ser 510	agg Arg	tct Ser	ccc Pro	acg Thr	agt Ser 515	aat Asn		1651
ggt Gly	ggg Gly	aga Arg	Ser	cgg Arg	Ala	Tyr	Met	ccc Pro 525	ccg Pro	cgg Arg	agc Ser	cgc Arg	agc Ser 530	cgg Arg	gac Asp		1699
gac Asp	ctc Leu	tat Tyr 535	gac Asp	caa Gln	gac Asp	gac Asp	tcg Ser 540	agg Arg	gac Asp	ttc Phe	cca Pro	cgc Arg 545	tcc Ser	cgg Arg	gac Asp		1747
ccc Pro	cac His 550	tac Tyr	gac Asp	gac Asp	ttc Phe	agg Arg 555	tct Ser	cgg Arg	gag Glu	cgc Arg	cct Pro 560	cct Pro	gcc Ala	gac Asp	ccc Pro		17.95
agg Arg 565	Ser	cac	cac His	cac His	cgt Arg 570	Thr	cgg Arg	gac Asp	cct Pro	cgg Arg 575	Asp	aac Asn	ggc Gly	tcc Ser	agg Arg 580		1843

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gag gcc tac tac ccg ccc gcg ccc ccg tac tcg gag acc gac tcg Glu Ala Tyr Tyr Pro Pro Ala Pro Pro Pro Tyr Ser Glu Thr Asp Ser 615 620 625	1987
cag gcg tcc cga gag cgc agg ctc aag aag aac ttg gcc ctg agt cgg Gln Ala Ser Arg Glu Arg Arg Leu Lys Lys Asn Leu Ala Leu Ser Arg 630 635 640	2035
gaa agt tta gtc gtc tga tctgacgttt tctacgtagc ttttgtattt Glu Ser Leu Val Val * 645	2083
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Met Ala Leu Leu Ala Gly Gly Leu Ser Arg Gly Leu Gly Ser His Pro	
50 55 60	

Thr Trp Cys Thr Ala Pro Ala Arg Ala Ile Gln Val Thr Val Ser Asn 90 Pro Tyr His Val Val Ile Leu Phe Gln Pro Val Thr Leu Pro Cys Thr 105 Tyr Gln Met Thr Ser Thr Pro Thr Gln Pro Ile Val Ile Trp Lys Tyr Lys Ser Phe Cys Arg Asp Arg Ile Ala Asp Ala Phe Ser Pro Ala Ser 130 135 Val Asp Asn Gln Leu Asn Ala Gln Leu Ala Ala Gly Asn Pro Gly Tyr . 155 Asn Pro Tyr Val Glu Cys Gln Asp Ser Val Arg Thr Val Arg Val Val 165 170 Ala Thr Lys Gln Gly Asn Ala Val Thr Leu Gly Asp Tyr Tyr Gln Gly 185 Arg Arg Ile Thr Ile Thr Gly Asn Ala Asp Leu Thr Phe Asp Gln Thr 200 Ala Trp Gly Asp Ser Gly Val Tyr Tyr Cys Ser Val Val Ser Ala Gln Asp Leu Gln Gly Asn Asn Glu Ala Tyr Ala Glu Leu Ile Val Leu Gly 235 230 Arg Thr Ser Gly Val Ala Glu Leu Leu Pro Gly Phe Gln Ala Gly Pro 250 245 Ile Glu Asp Trp Leu Phe Val Val Val Cys Leu Ala Ala Phe Leu 265 260 Ile Phe Leu Leu Gly Ile Cys Trp Cys Gln Cys Cys Pro His Thr 280 Cys Cys Cys Tyr Val Arg Cys Pro Cys Cys Pro Asp Lys Cys Cys 290 295 Pro Glu Ala Leu Tyr Ala Ala Gly Lys Ala Ala Thr Ser Gly Val Pro 310 Ser Ile Tyr Ala Pro Ser Thr Tyr Ala His Leu Ser Pro Ala Lys Thr 330 Pro Pro Pro Pro Ala Met Ile Pro Met Gly Pro Ala Tyr Asn Gly Tyr 340 Pro Gly Gly Tyr Pro Gly Asp Val Asp Arg Ser Ser Ser Ala Gly Gly 360 Gln Gly Ser Tyr Val Pro Leu Leu Arg Asp Thr Asp Ser Ser Val Ala 380 370

Ser Glu Val Arg Ser Gly Tyr Arg Ile Gln Ala Ser Gln Gln Asp Asp 390 395 385 Ser Met Arg Val Leu Tyr Tyr Met Glu Lys Glu Leu Ala Asn Phe Asp 410 Pro Ser Arg Pro Gly Pro Pro Ser Gly Arg Val Glu Arg Ala Met Ser 425 Glu Val Thr Ser Leu His Glu Asp Asp Trp Arg Ser Arg Pro Ser Arg Gly Pro Ala Leu Thr Pro Ile Arg Asp Glu Glu Trp Gly Gly His Ser 455 Pro Arg Ser Pro Arg Gly Trp Asp Gln Glu Pro Ala Arg Glu Gln Ala 470 Gly Gly Gly Trp Arg Ala Arg Pro Arg Ala Arg Ser Val Asp Ala 485 490 Leu Asp Asp Leu Thr Pro Pro Ser Thr Ala Glu Ser Gly Ser Arg Ser Pro Thr Ser Asn Gly Gly Arg Ser Arg Ala Tyr Met Pro Pro Arg Ser 515 Arg Ser Arg Asp Asp Leu Tyr Asp Gln Asp Asp Ser Arg Asp Phe Pro Arg Ser Arg Asp Pro His Tyr Asp Asp Phe Arg Ser Arg Glu Arg Pro 555 Pro Ala Asp Pro Arg Ser His His Arg Thr Arg Asp Pro Arg Asp 565 570 Asn Gly Ser Arg Ser Gly Asp Leu Pro Tyr Asp Gly Arg Leu Leu Glu 585 Glu Ala Val Arg Lys Lys Gly Ser Glu Glu Arg Arg Pro His Lys 595 600 Glu Glu Glu Glu Ala Tyr Tyr Pro Pro Ala Pro Pro Pro Tyr Ser 615 Glu Thr Asp Ser Gln Ala Ser Arg Glu Arg Arg Leu Lys Lys Asn Leu 635 630

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gga ctt gga gta ggg aca agg aac gga agt ggg aag ggg agg agc Gly Leu Gly Val Gly Thr Arg Asn Gly Ser Gly Lys Gly Arg Ser 5 10 15	gtg 163 Val 20	3
cac ccc tcc tgg cct tgg tgc gcg ccg cgc ccc cta agg tac ttt His Pro Ser Trp Pro Trp Cys Ala Pro Arg Pro Leu Arg Tyr Phe 25 30 35	gga 21 Gly	1
agg gac gcg cgg gcc aga cgc gcc cag acg gcc gcg atg gcg ctg Arg Asp Ala Arg Ala Arg Arg Ala Gln Thr Ala Ala Met Ala Leu 40 45 50	g ttg 259 n Leu	9
gcc ggc ggg ctc tcc aga ggg ctg ggc tcc cac ccg gcc gca Ala Gly Gly Leu Ser Arg Gly Leu Gly Ser His Pro Ala Ala Ala 55 60 65	r ggc 30	7
cgg gac gcg gtc gtc ttc gtg tgg ctt ctg ctt agc acc tgg tgc Arg Asp Ala Val Val Phe Val Trp Leu Leu Ser Thr Trp Cys 70 75 80	c aca 35	5
gct cct gcc agg gcc atc cag gtg acc gtg tcc aac ccc tac cac Ala Pro Ala Arg Ala Ile Gln Val Thr Val Ser Asn Pro Tyr His 85 90 95	gtg 40 s Val 100	3
gtg atc ctc ttc cag cct gtg acc ctg ccc tgt acc tac cag atg Val Ile Leu Phe Gln Pro Val Thr Leu Pro Cys Thr Tyr Gln Met 105 110 115	Thr	1
tcg acc ccc acg caa ccc atc gtc atc tgg aag tac aag tct ttc Ser Thr Pro Thr Gln Pro Ile Val Ile Trp Lys Tyr Lys Ser Phe 120 125 130	c tgc 49 e Cys	9
cgg gac cgc atc gcc gat gcc ttc tcc ccg gcc agc gtc gac aac Arg Asp Arg Ile Ala Asp Ala Phe Ser Pro Ala Ser Val Asp Asn 135 140 145	c cag 54 n Gln	7
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Ile	Thr	Gly	Asn 200	Ala	Asp	Leu	Thr	Phe 205	Asp	Gln	Thr	Ala	Trp 210	Gly	Asp	
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agt Ser 405	Gly	cgt Arg	gtg Val	gag Glu	cgg Arg 410	Ala	atg Met	agt Ser	gaa Glu	gto Val 415	Thr	tcc Ser	ctc Leu	cac His	gag Glu 420	1363

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					ggt Gly											1459
					agg Arg											1507
cgg Arg	ccc Pro 470	cgg Arg	gcc Ala	cgc Arg	tcc Ser	gtg Val 475	gac Asp	gcc Ala	ctg Leu	gac Asp	gac Asp 480	ctc Leu	acc Thr	ccg Pro	ccg Pro	1555
					ggg Gly 490											1603
					ccc Pro											1651
					agg Arg											1699
					cgg Arg											1747
cac His	cac His 550	cgt Arg	acc Thr	cgg Arg	gac Asp	cct Pro 555	cgg Arg	gac Asp	aac Asn	ggc Gly	tcc Ser 560	agg Arg	tcc Ser	ggg	gac Asp	1795
					cgg Arg 570											1843
tcg Ser	gag Glu	gag Glu	agg Arg	agg Arg 585	aga Arg	ccc Pro	cac His	aag Lys	gag Glu 590	gag Glu	gag Glu	gaa Glu	gag Glu	gcc Ala 595	tac Tyr	1891
tac Tyr	ccg Pro	ccc Pro	gcg Ala 600	ccg Pro	ccc Pro	ccg Pro	tac Tyr	tcg Ser 605	gag Glu	acc Thr	gac Asp	tcg Ser	cag Gln 610	gcg Ala	tcc Ser	1939
					aag Lys											1987
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cacaa 2101

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Arg Tyr Phe Gly Arg Asp Ala Arg Ala Arg Arg Ala Gln Thr Ala Ala 35 40 45

Met Ala Leu Leu Ala Gly Gly Leu Ser Arg Gly Leu Gly Ser His Pro 50 55 60

Ala Ala Ala Gly Arg Asp Ala Val Val Phe Val Trp Leu Leu Ser 65 70 75 80

Thr Trp Cys Thr Ala Pro Ala Arg Ala Ile Gln Val Thr Val Ser Asn 85 90 95

Pro Tyr His Val Val Ile Leu Phe Gln Pro Val Thr Leu Pro Cys Thr 100 105 110

Tyr Gln Met Thr Ser Thr Pro Thr Gln Pro Ile Val Ile Trp Lys Tyr
115 · 120 125

Lys Ser Phe Cys Arg Asp Arg Ile Ala Asp Ala Phe Ser Pro Ala Ser 130 135 140

Val Asp Asn Gln Leu Asn Ala Gln Leu Ala Ala Gly Asn Pro Gly Tyr 145 150 155 160

Asn Pro Tyr Val Glu Cys Gln Asp Ser Val Arg Thr Val Arg Val Val 165 170 175

Ala Thr Lys Gln Gly Asn Ala Val Thr Leu Gly Asp Tyr Tyr Gln Gly 180 185 190

Arg Arg Ile Thr Ile Thr Gly Asn Ala Asp Leu Thr Phe Asp Gln Thr
195 200 205

Ala Trp Gly Asp Ser Gly Val Tyr Tyr Cys Ser Val Val Ser Ala Gln 210 215 220

Asp Leu Gln Gly Asn Asn Glu Ala Tyr Ala Glu Leu Ile Val Leu Asp 225 230 . 235 240

Trp Leu Phe Val Val Val Cys Leu Ala Ala Phe Leu Ile Phe Leu

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24J	250	200

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Tyr	Val	Arg 275	Cys	Pro	Cys	Cys	Pro 280	Asp	Lys	Cys	Cys	Cys 285	Pro	Glu	Ala
Leu	Tyr 290	Ala	Ala	Gly	Lys	Ala 295	Ala	Thr	Ser		Val 300	Pro	Ser	Ile	Tyr
Ala 305	Pro	Ser	Thr	Tyr	Ala 310	His	Leu	Ser	Pro	Ala 315	Lys	Thr	Pro	Pro	Pro 320
Pro	Ala	Met	Ile	Pro 325	Met	Gly	Pro	Ala	Tyr 330	Asn	Gly	Tyr	Pro	Gly 335	Gly
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Tyr	Val	Pro 355	Leu	Leu	Arg	Asp	Thr 360	Asp	Ser	Ser	Val	Ala 365	Ser	Glu	Val
Arg	Ser 370	Gly	Tyr	Arg	Ile	Gln 375	Ala	Ser	Gln	Gln	Asp 380	Asp	Ser	Met	Arg
Val 385	Leu	Tyr	Tyr	Met	Glu 390	Lys	Glu	Leu	Ala	Asn 395	Phe	Asp	Pro	Ser	Arg 400
Pro	Gly	Pro	Pro	Ser 405	Gly	Arg	Val	Glu	Arg 410	Ala	Met	Ser	Glu	Val 415	Thr
			420					425					Gly 430		
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	450	_	_			455					460		Gly		
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Ala Ala Ala Gly Arg Asp Ala Val Val Phe Val Trp Leu Leu Leu Ser 65 70 75 80

Thr Trp Cys Thr Ala Pro Ala Arg Ala Ile Gln Val Thr Val Ser Asn 85 90 95

Pro Tyr His Val Val Ile Leu Phe Gln Pro Val Thr Leu Pro Cys Thr 100 105 110

Tyr Gln Met Thr Ser Thr Pro Thr Gln Pro Ile Val Ile Trp Lys Tyr 115 120 125

Lys Ser Phe Cys Arg Asp Arg Ile Ala Asp Ala Phe Ser Pro Ala Ser 130 135 140

Val Asp Asn Gln Leu Asn Ala Gln Leu Ala Ala Gly Asn Pro Gly Tyr 145 150 155 160

Asn Pro Tyr Val Glu Cys Gln Asp Ser Val Arg Thr Val Arg Val Val 165 170 175

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Lys Lys Gly 530	Ser Glu Glu Arg 535	Arg Arg Pro i	His Lys Glu Glu 540	Glu Glu
Glu Ala Tyr 545	Tyr Pro Pro Ala 550		Tyr Ser Glu Thr 555	Asp Ser 560
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cgg Arg	cct	ggc Gly	tcc Ser	act Thr 430	gaa Glu	tca Ser	gga Gly	agg Arg	tct Ser 435	tct Ser	ccc Pro	cca Pro	agt Ser	agt Ser 440	gga Gly	134	ġ.
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cac His	tat Tyr 475	tat Tyr	gat Asp	gat Asp	ttg Leu	agg Arg 480	tct Ser	agg Arg	gat Asp	cca Pro	cgt Arg 485	gct Ala	gac Asp	ccc Pro	aga Arg	149	2
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	Glu				gtc Val 575		tcc	cacg	ttt	tgtt	atgt	ag c	tttt	atac	t ·	178	3
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cct gac ccc tac ca Pro Asp Pro Tyr Hi 45	c gta gtg at s Val Val Il	cc ctg ttc Leu Phe 50	Gln Pro Val	aca cta of Thr Leu 555	cac 196 His
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tat Tyr	atg Met	gag Glu	aag Lys 285	gag Glu	cta Leu	gcc Ala	aac Asn	ttc Phe 290	gat Asp	cct Pro	tcc Ser	cgg Arg	cct Pro 295	ggc	cct Pro	916
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	agt Ser				tga *	tcc	cacg	ttt 1	tgtt	atgt	ag c	tttt	atac	t		1636
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<213> Mus musculus

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100

110

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Glu Glu Trp Asn Arg His Ser Pro Arg Ser Pro Arg Thr Trp Glu Gln

405 410 415

Glu Pro Leu Gln Glu Gln Pro Arg Gly Gly Trp Gly Ser Gly Arg Pro
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Arg Ala Arg Ser Val Asp Ala Leu Asp Asp Ile Asn Arg Pro Gly Ser
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Thr Glu Ser Gly Arg Ser Ser Pro Pro Ser Ser Gly Arg Arg Gly Arg 450 455 460

Ala Tyr Ala Pro Pro Arg Ser Arg Ser Arg Asp Asp Leu Tyr Asp Pro 465 470 475 480

Asp Asp Pro Arg Asp Leu Pro His Ser Arg Asp Pro His Tyr Tyr Asp 485 490 495

Asp Leu Arg Ser Arg Asp Pro Arg Ala Asp Pro Arg Ser Arg Gln Arg 500 505 510

Ser His Asp Pro Arg Asp Ala Gly Phe Arg Ser Arg Asp Pro Gln Tyr 515 520 525

Asp Gly Arg Leu Leu Glu Glu Ala Leu Lys Lys Lys Gly Ala Gly Glu 530 540

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Ile Leu Phe Gln Pro Val Thr Leu His Cys Thr Tyr Gln Met Ser Asn 50 55 60

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Asp	Arg	Val	Ala	Asp 85	Ala	Phe	Ser	Pro	Ala 90	Ser	Val	Asp	Asn	Gln 95	Leu
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Cys	Gln	Asp 115	Ser	Val	Arg	Thr	Val 120	Arg	Val	Val	Ala	Thr 125	Lys	Gln	Gly.
Asn	Ala 130	Val	Thr	Leu	Gly	Asp 135	Tyr	Tyr	Gln	Gly	Arg 140	Arg	Ile	Thr	Ile
Thr 145	Gly	Asn	Ala	Gly	Leu 150	Thr	Phe	Glu	Gln	Thr 155	Ala	Trp	Gly	Asp	Ser 160
Gly	Val	Tyr	Tyr	Cys 165	Ser	Val	Val	Ser	Ala 170	Gln	Asp	Leu	Asp	Gly 175	Asn
Asn	Glu	Ala	Tyr 180	Ala	Glu	Leu	Ile	Val 185	Leu	Asp	Trp	Leu	Phe 190	Val	Val
Val	Val	Cys 195	Leu	Ala	Ser	Leu	Leu 200	Phe	Phe	Leu	Leu	Leu 205	Gly	Ile	Cys
Trp	Cys 210	Gln	Cys	Cys	Pro	His 215	Thr	Cys	Cys	Cys	Tyr 220	Val	Arg	Cys	Pro
Cys 225	Cys	Pro	Asp	Lys	Cys 230	Cys	Cys	Pro	Glu	Ala 235	Leu	Tyr	Ala	Ala	Gly 240
Lys	Ala	Ala	Thr	Ser 245		Val	Pro	Ser	Ile 250	Tyr	Ala	Pro	Ser	Ile 255	Tyr
Thr	His	Leu	Ser 260		Ala	Lys	Thr	Pro 265	Pro	Pro	Pro	Pro	Ala 270	Met	Ile
Pro	Met	Arg 275		Pro	Tyr	Gly	Tyr 280	Pro	Gly	Asp	Phe	Asp 285	Arg	Thr	Ser
Ser	Val 290		Gly	His	Ser	Ser 295		Val	Pro	Leu	Leu 300	Arg	Glu	Val	Asp
Gly 305		Val	Ser	Ser	Glu 310		Arg	Ser	Gly	Tyr 315		Ile	Gln	Ala	Asn 320
Gln	Gln	Asp	Asp	Ser 325		Arg	Val	Leu	Tyr 330	Tyr	Met	Glu	Lys	Glu 335	Leu
Ala	Asn	Phe	340		Ser	Arg	Pro	Gly 345		Pro	Asn	Gly	Arg 350	Val	·Glu
Arg	Ala	Met		Glu	ı Val	Thr	Ser	Leu	His	Glu	Asp	Asp 365	Trp	Arg	Ser

Arg Pro Ser Arg Ala Pro Ala Leu Thr Pro Ile Arg Asp Glu Glu Trp 375 Asn Arg His Ser Pro Arg Ser Pro Arg Thr Trp Glu Gln Glu Pro Leu 395 390 Gln Glu Gln Pro Arg Gly Gly Trp Gly Ser Gly Arg Pro Arg Ala Arg 405 Ser Val Asp Ala Leu Asp Asp Ile Asn Arg Pro Gly Ser Thr Glu Ser Gly Arg Ser Ser Pro Pro Ser Ser Gly Arg Arg Gly Arg Ala Tyr Ala 435 Pro Pro Arg Ser Arg Ser Arg Asp Asp Leu Tyr Asp Pro Asp Asp Pro Arg Asp Leu Pro His Ser Arg Asp Pro His Tyr Tyr Asp Asp Leu Arg 475 Ser Arg Asp Pro Arg Ala Asp Pro Arg Ser Arg Gln Arg Ser His Asp 490 485 Pro Arg Asp Ala Gly Phe Arg Ser Arg Asp Pro Gln Tyr Asp Gly Arg 505 Leu Leu Glu Glu Ala Leu Lys Lys Lys Gly Ala Gly Glu Arg Arg 520 Val Tyr Arg Glu Glu Glu Glu Glu Glu Glu Glu Gly His Tyr Pro Pro 535 Ala Pro Pro Pro Tyr Ser Glu Thr Asp Ser Gln Ala Ser Arg Glu Arg 555 550 Arg Met Lys Lys Asn Leu Ala Leu Ser Arg Glu Ser Leu Val Val 575 570 565

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Glu Gln Pro Arg Gly Gly Trp Gly Ser Gly Arg Pro Arg Ala Arg Ser 355 360 365

Val Asp Ala Leu Asp Asp Ile Asn Arg Pro Gly Ser Thr Glu Ser Gly 370 375 380

Arg Ser Ser Pro Pro Ser Ser Gly Arg Gly Arg Ala Tyr Ala Pro 385 390 395 400

Pro Arg Ser Arg Ser Arg Asp Asp Leu Tyr Asp Pro Asp Pro Arg
405 410 415

Asp Leu Pro His Ser Arg Asp Pro His Tyr Tyr Asp Asp Leu Arg Ser 420 425 430

Arg Asp Pro Arg Ala Asp Pro Arg Ser Arg Gln Arg Ser His Asp Pro 435 440 445

Arg Asp Ala Gly Phe Arg Ser Arg Asp Pro Gln Tyr Asp Gly Arg Leu 450 455 460

Leu Glu Glu Ala Leu Lys Lys Lys Gly Ala Gly Glu Arg Arg Arg Val 465 470 475 480

Tyr Arg Glu Glu Glu Glu Glu Glu Glu Gly His Tyr Pro Pro Ala 485 490 495

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